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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,905	08/22/2001	Omar Alonso	19111.0051	7411

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EXAMINER

NGUYEN, MERILYN P

ART UNIT	PAPER NUMBER
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2171

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DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

for

## Office Action Summary

Application No.

09/933,905

Applicant(s)

ALONSO ET AL.

Examiner

Merilyn P Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Detailed Action.

### **DETAILED ACTION**

1. Claims 1-27 are pending in this office action.

#### **Specification**

2. The disclosure is objected to because of the following informalities:

At page 2, line 14, "and user profile data" is duplicated.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 10, and 19, these claims are being incomplete for omitting essential structural cooperative relationships of elements. The step of "retrieving at least one recommendation relating to the search query" is not related to other limitations in the claim. This step seems to be separated from the other steps. Clarification of the claims is requested.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 10-15, and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Pitkow (US 2002/0016786).

Regarding claims 1, 10, and 19, Pitkow discloses a method of searching comprising the steps of:

- receiving from a user a search query requesting information (See paragraphs [0103], lines 3-4, and [0123], lines 6-8);
- retrieving at least one recommendation relating to the search query (See paragraphs [0103], lines 5-7, and [0123], lines 8-27);
- generating an expanded query based on the received query (See paragraphs [0103], [0104], and [0123], lines 8-27);
- performing a search using the expanded query to retrieve documents (See paragraph [0105]); and
- generating thematic clusters relating to the retrieved documents (See paragraph [0093], lines 3-10, and [0138]).

Regarding claims 2, 11, and 20, Pitkow discloses wherein the recommendation relating to the search query is based on users search query logs and search pattern information (See paragraph [0118, 0119], and [0123], lines 8-18).

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Regarding claims 3, 12, and 21, Pitkow discloses wherein the recommendation is further based on user profile information (See paragraph [0123], lines 8-12).

Regarding claims 4, 13, and 22, Pitkow discloses wherein the user profile information comprises aggregate information (See paragraph [0120]).

Regarding claims 5, 14, and 23, Pitkow discloses wherein the at least one recommendation relating to the search query is retrieved from a recommendation database (See paragraph [0097]).

Regarding claims 6, 15, and 24, Pitkow discloses wherein the recommendation database is generated by performing the steps of:

- performing data mining using users search query logs, user search patterns, and user profile information to generate a plurality of recommendations relating to search query strings based on the users search query logs, user search patterns, and user profile information [See paragraphs [0097], [0122], and [0128]];
- generating a data structure including the recommendations relating to search query strings [See [0098]]; and
- generating a text index based on information in the data structure (See paragraph [0030] and claim 14).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-9, 16-18, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable Pitkow (US 2002/0016786), in view of Hofmann (US 6,687,696).

Regarding claims 7, 16, and 25, Pitkow discloses all the claimed limitation as set forth above. However, Pitkow is silent as to discloses populating an initial data structure with recommendations relating to search query strings, including an equivalence table comprising a plurality of terms and/or phrases and equivalents thereof; converting the plurality of terms and/or phrases and equivalents thereof to eXtensible Markup Language format; and validating availability of the recommendations. On the other hand, Hofmann teaches populating an initial data structure with recommendations relating to search query strings, including an equivalence table comprising a plurality of terms and/or phrases and equivalents thereof (See Fig. 7, and Col. 6, line 38 to Col. 7, line 33, Hofmann); converting the plurality of terms and/or phrases and equivalents thereof to eXtensible Markup Language format (130, 131, Fig. 9, and col. 16, lines 29-47, Hofmann et al.); and validating availability of the recommendations (See col. 16, lines 57-67, Hofmann et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention to populate a data structure including a table of terms or phrases and convert those terms or phrases to XML as suggested by Hofmann so that a fast, flexible search system would be provided. Populating table of terms or phrases in XML format would provide

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standardized format to all web-based search system. Moreover, having the ability of validating the recommendations would enhance the search ability so that resulting more accurate documents.

Regarding claims 8, 17, and 26, Pitkow/Hofmann discloses wherein the step of retrieving at least one recommendation relating to a search query string comprises the steps of:

- parsing the received search query to generate a search query string (See paragraph [0103], lines 3-11, Pitkow et al.);
- searching the populated data structure using the search query string to find a key associated with at least one recommendation relating to the search query string (See paragraphs [0097], [0100], Pitkow et al.); and
- retrieving the at least one recommendation relating to the search query string using the key (See paragraph [0100], Pitkow et al.).

Regarding claims 9, 18, and 27, Pitkow/Hofmann discloses wherein the step of retrieving at least one recommendation relating to a search query string comprises the steps of:

- parsing the received search query to generate a search query string (See paragraph [0103], lines 3-11, Pitkow et al.);
- searching the populated data structure using the search query string to find a key associated with at least one recommendation relating to the search query string, and if the key is found, retrieving the at least one recommendation relating to the

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search query string using the key (See paragraphs [0097], [0100], Pitkow et al.);

and

- searching the equivalence table of the populated data structure using the search query string to find an alternative key associated with at least one recommendation relating to the search query string, and retrieving the at least one recommendation for information using the alternative key, if the key is not found (See paragraphs [0100, 0101], Pitkow et al.).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Garner U.S. 2003/0066025 discloses method and system for information retrieval.

Wical U.S. Patent No. 6,038,560 discloses concept knowledge base search and retrieval system.

Jain U.S. Patent No. 5,983,237 discloses visual dictionary.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marilyn P. Nguyen whose telephone number is 703-305-5177.

The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on 703-308-1436. The fax phone numbers for the



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organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*MN*

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March 5, 2004

*P. Metjahic*  
SAFET METJAHIC  
SENIOR PATENT EXAMINER  
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